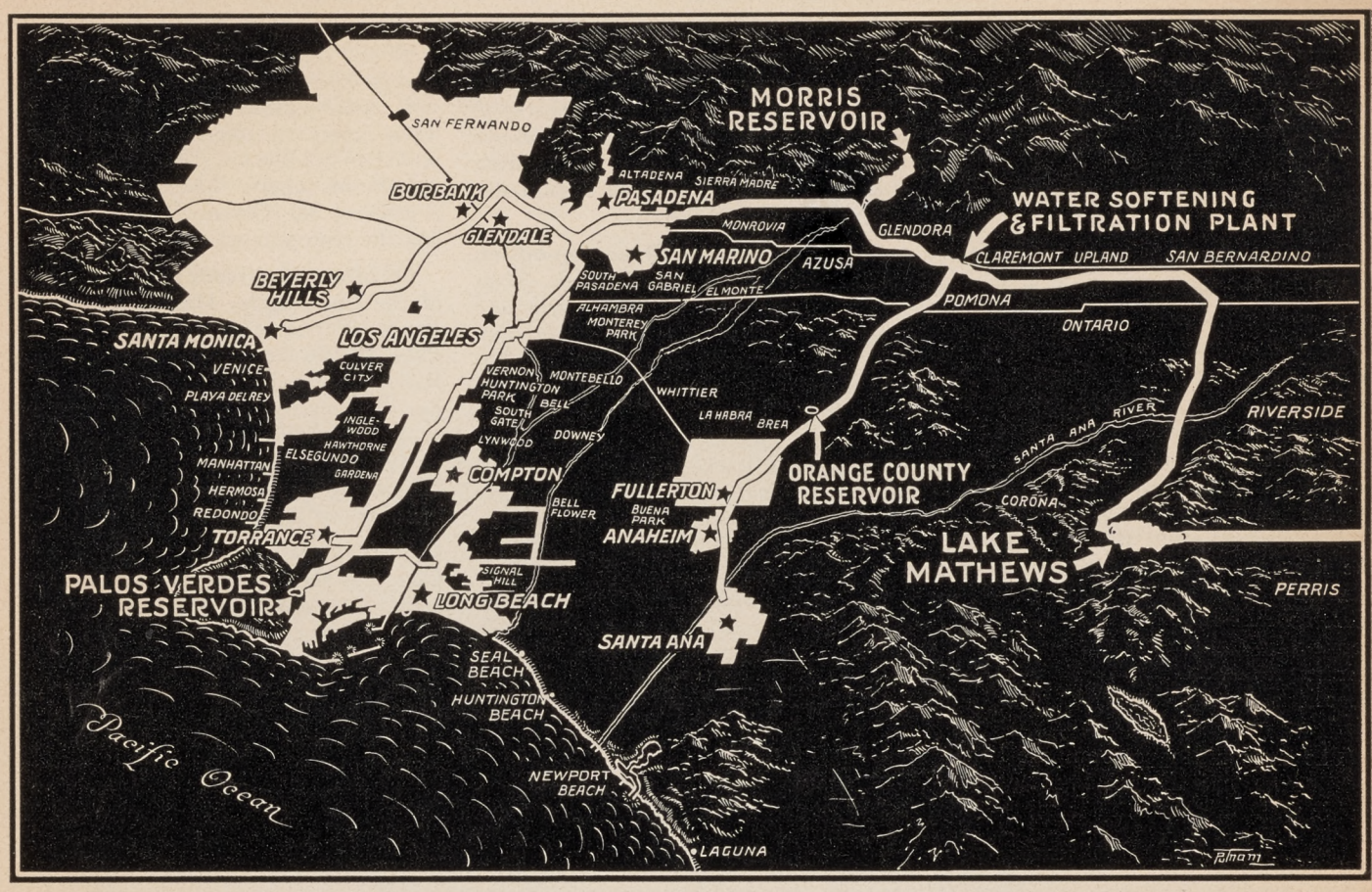
Vital War Service Rendered by Colorado River Aqueduct



Here in decisive black and white is a graphic picture of the Distribution System of the Colorado River Aqueduct and the manner in which it serves to sustain and protect the people, the war industries and the military establishments situated within the 610 square miles of the thirteen cities which comprise The Metropolitan Water District of Southern California. Note the strategic location of the four close-in Aqueduct reservoirs with their billions of gallons of water constantly ready for use. Distribution lines, reservoirs and areas of the District cities are shown in white. District cities which can be served by the Aqueduct are Anaheim, Beverly Hills, Burbank, Compton, Fullerton, Glendale, Long Beach, Los Angeles, Pasadena, San Marino, Santa Ana, Santa Monica and Torrance.

A Statement by Chairman W. P. Whitsett, Board of Directors, The Metropolitan Water District of Southern California

Of basic and vital importance to a people at war is that every day necessity of life—water.

And in the firm possession of an abundant and dependable supply of water are the thirteen cities which comprise The Metropolitan Water District of Southern California. The ample and constantly available water resources of these thirteen cities are of far more than local significance. These water resources now constitute a condition of defense and war preparedness benefiting the entire nation. This is true because today these thirteen Southern California cities are the heart and center of America's continental military and naval establishments. At the same time, they are in effect a mighty and ever expanding workshop engaged in the task of forging indispensable fighting tools for America.

Possession of this fundamental necessity of water is not a natural heritage of these cities which have been builded in the semi-arid southwest corner of the United States. Only by the civic vision and courage of the citizenry of these communities and by the skill and labor of a peace-time army of engineers and workmen has this timely and dependable supply of water been made available for our people and our country's fighting forces.

More than eighteen years ago the far-sighted leaders of the communities which now constitute the Metropolitan Water District recognized the need for the development of a large additional supply of water from the distant Colorado River. In the summer of 1941, after almost a score of years of planning and building, the Colorado River Aqueduct was completed and placed in operation. It was under construction during the years between 1932 and 1941 when its employment benefits were of the highest value to the citizens of the thirteen District cities, and when materials could be obtained at reasonable costs. To start

planning the Aqueduct now, with the hope of having it ready for use even ten years hence, would be, practically speaking, to attempt the impossible. The men and materials are not available. And even though these essentials could be obtained, such a project now would be enormously more costly to complete.

The thirteen cities comprising the Metropolitan Water District are Anaheim, Beverly Hills, Burbank, Compton, Fullerton, Glendale, Long Beach, Los Angeles, Pasadena, San Marino, Santa Ana, Santa Monica and Torrance.

On America's Fighting Front

When America, a little more than a year ago, began seriously to gird herself for the enormous task of national defense, the cities of the District were ready to provide in this normally semi-arid region the water supplies required to support and protect great new industrial plants and military establishments. As the nation now finds itself at war, and expending every effort to preserve the life and liberty of our people, this condition of water supply preparedness takes on first ranking military and economic value. For Fate has placed these thirteen Southern California cities on America's fighting front. And they are ready and prepared to do their job.

The map which appears on page 1 indicates clearly the thirteen District cities, and in white are shown the areas covered by these cities. In addition to the areas of the District itself, the State law governing the District authorizes the service of Colorado River Aqueduct water to Federal and State establishments within the zone of Aqueduct service. Already this water service is being made available to March Field and Camp Haan.

Multiple Water Sources

From the standpoint of war production and defense, the thirteen District cities are no longer in the precarious condition of "carrying all their eggs in one basket" so far as their water resources are concerned. This is because the Colorado River Aqueduct has given all of these communities the tremendous advantage of having multiple sources of water supply.

These resources include:

1. **Local Underground Water Basins.** Generally speaking, it has been necessary to augment and in some instances replace these underground water supplies because in past years they have been heavily overdrawn. That is why the Aqueduct was built. But in almost all cases underground supplies remain available to meet conditions of emergency and of temporary duration. Furthermore, the present availability of the Aqueduct supply now offers the opportunity to relieve the draft on these local underground reservoirs, and thus enable them once more to recapture additional reserve supplies.

2. **The Owens River Aqueduct,** which serves Los Angeles exclusively. This aqueduct system, owned by the City of Los Angeles and delivering water to consumers within that city, has its source in the snow waters from the eastern slopes of the Sierra Nevada Mountains, 300 miles north of the city.

3. **The Colorado River Aqueduct,** with its intake on the Colorado River 300 miles to the east of Los Angeles and neighboring cities, and with its distribution system available to give abundant water service to all of the thirteen District cities. This giant Aqueduct draws its water supplies from the western slopes of the Rocky Mountains, a vast area of 245,000 square miles. Its source is far removed from both the local underground basins of Southern California and the Sierra Nevada sources of the Owens River Aqueduct. Thus, there is provided practically complete protection against a condition of drought which might affect local basins or even the snow crop on the High Sierras.

Storage Gives Protection

With the hazards of war now confronting the people of the Coastal Plain of Southern California, another one of the vital advantages enjoyed by the communities of the Metropolitan Water District is that of having a vast quantity of water actually in storage near at hand and available for instant and continuous delivery under pressure. Functioning as important operating features of the Aqueduct's distribution system are four reservoirs. Largest of these is Lake Mathews, situated ten miles southwest of Riverside, and now holding in storage approximately 85,000 acre feet, or 28 billion gallons of water. Next in size is Morris Reservoir which now impounds about 30,000 acre feet, or 10 billion gallons. The vital importance of these two great stores of water reserves is apparent when it is pointed out that together they now hold, without being replenished, sufficient water to meet all of the normal needs of the thirteen District cities for a period of more than five months, even though all other water supply sources in the thirteen cities were to be cut off.

This means that should Los Angeles and the other twelve cities of the Metropolitan Water District suddenly find themselves cut off from their local and Owens River Aqueduct supplies, there is now actually sufficient water in storage in the District's Lake Mathews and Morris reservoirs to supply the normal requirements of all these cities for a period of more than five months. This does not take into account the numerous close-in reservoirs that function as a part of the Los Angeles municipal system.

Water stored in Lake Mathews and Morris Reservoir is delivered to the District cities by gravity and under pressure. Thus, even an interruption in power service in Southern California would not cut off this supply. The same, of course, is true of the Owens River Aqueduct and the reservoirs on that supply system.

Of prime importance to the protection of the Los Angeles Harbor area, Long Beach, Torrance and Compton, is the Palos Verdes Reservoir on the Colorado River Aqueduct system. This reservoir has the capacity to store 1000 acre feet, or 326,000,000 gallons of water, enough to provide invaluable fire protection to the nearby District areas in the event of a major conflagration.

Over in the hills of northern Orange County is the Orange County Reservoir, acting as a storage and regulating basin of the Aqueduct line serving Fullerton, Anaheim and Santa Ana. This reservoir alone, with its capacity of 200 acre feet, or 65,000,000 gallons, would supply, without being replenished, all of the normal water needs of these three communities for a period of ten days.

Vast Water Reserves

And then, of course, behind the storage capacity of the various Colorado River Aqueduct reservoirs, there is the huge water supply line itself. With its intake on the Colorado River, the Aqueduct draws upon the well nigh inexhaustible water reserves stored in Lake Havasu back of Parker Dam and in Lake Mead back of Boulder Dam. And above these two mammoth storage basins lie the 245,000 square miles of snow-blanketed Rockies draining into the Colorado River.

The Colorado River Aqueduct now is able to deliver 600 second feet of water into Lake Mathews. That means a steady stream of water flowing at the rate of 600 cubic feet per second—enough water to meet the normal requirements of more than 2,000,000 persons. Ultimately, the Aqueduct will have a capacity of 1500 second feet, or approximately a billion gallons daily.

Such are the multiple water sources and systems now available day and night to sustain and protect the vital theatre of war operations situated within the boundaries of the thirteen cities of The Metropolitan Water District of Southern California.

Guarding Billions in Values

The combined areas of the cities of the Metropolitan Water District amount to approximately 390,000 acres, or about 610 square miles. The present assessed valuation of property within these cities is $1,900,000,000. Added to this, there is about $600,000,000 in City, County, State, Federal and veteran-owned property exempted from taxation. All of this property, with a combined assessed and non-assessed valuation of $2,500,000,000, is supported and protected by the ample and permanent water supply provided by the Colorado River Aqueduct.

It is not by accident or through sheer coincidence that great aircraft and shipbuilding plants and their surrounding worker communities have been located within such Metropolitan Water District cities as Burbank, Santa Monica, Torrance, Long Beach, Glendale, Compton and Los Angeles, including the Los Angeles-Long Beach Harbor area.

Nor is it accidental that the area of the Metropolitan Water District includes such other residential communities as Pasadena, San Marino, Beverly Hills, Santa Ana, Fullerton and Anaheim. These cities have taken the necessary step to provide their homes and business enterprises with the low cost insurance of a dependable and permanent water supply, which protects the value of all existing home and commercial development and provides a secure basis for orderly and healthy growth in the years to come.

The Aqueduct system as it stands today represents an investment of approximately $193,000,000. Each of the District cities bears its pro rata share of the District's financial obligations, and each city is entitled to its pro rata share of the benefits of the Aqueduct water supply.

Located within the Los Angeles and Orange County metropolitan area, there are a number of communities not now within the Metropolitan Water District. Most of these areas are physically situated within reach of Aqueduct water service, and this service will be extended to all communities which may later be annexed to the District and thus assume, along with the present thirteen cities, a fair share of the Aqueduct costs, as well as secure the permanent assurance of an abundant water supply.

View of a small portion of Lake Mathews where billions of gallons of water are now in reserve storage for use and protection of the thirteen District cities. At right center is seen the reservoir's outlet tower and a section of its dike.

The Metropolitan Water District of Southern California

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